REMARKS

The Personal Interview of June 30, 2004 is gratefully acknowledged. The Interview Summary prepared by the Examiner fully summarizes the reasons advanced for allowance. Further comments follow.

Turning first to the art of record, it is noted that heated pressware die sets which reciprocate with respect to each other are known. It is also noted that cast-in heaters are known; however there is no art which remotely suggests cast-in heaters have superior durability in a reciprocating pressware die set. In this regard it is noted that the secondary reference cited (*Gospe* '730) is simply an oven with stationary parts.

Turning next to unexpected results, it was pointed out at the interview that the claimed cast-in heater equipped reciprocating die set of this application is over 80 times more reliable than a conventional, ring-heater equipped die set (575/7, see below). That is an increase in reliability of over eight thousand percent (8000%). It is further pointed out that the results are unexpected, *Littlejohn* Declaration, ¶ 9.

Thus, the evidence presented in paragraphs 6 through 9 of the *Littlejohn* Declaration establishes both superior results and that those results were unexpected:

> 6. That he understands from Counsel that a *Declaration of Dana Markwell* previously submitted in this application states on page 4 that 7 failures were experienced with 100 cast-in heaters in pressware die sets over a one-year period (a 7% failure rate per year) versus 345 failures over a one-year period with 60 conventional ring heaters (a 575% per annum failure rate) experienced with conventional heaters, which thus had an average useful life of about two (2) months.
>
> 7. That his personal experience with cast-in heaters is consistent with that reported by Dana Markwell. He is aware of instances where cast-in heaters have lasted over four (4) years of operation in a pressware die set, whereas conventional ring heaters are typically replaced in less than a

year. That the longevity of the cast-in heaters in a pressware die set has provided incentive to further invest in the technology since the *Markwell Declaration* was submitted in this application in 2002.

8. That despite their cost of over three hundred dollars ($300.00) apiece, Georgia-Pacific Corporation, Dixie Division, has already installed over seven hundred (700+) cast-in heaters and is planning on installing five hundred (500) more in 2004. In addition, all new paperboard pressware forming tools being commissioned by Georgia-Pacific include cast-in heaters in the die set.

9. That the commercial success of the Present Invention is due in large measure to the remarkable and unexpected reliability for the cast-in heaters noted above. A typical commercial press may have five or six die sets each having at least two heaters in a single die set. A failure of one heater in one die set is enough to cause shutdown of the entire press.

The law is believed quite clear when evidence such as the above is presented – this case should be allowed. *In re Soni,* 34 USPQ2d 1684, 1687 (CAFC 1995) is *apropos*:

> In our view, however, when an applicant demonstrates substantially improved results, as Soni did here, and states that the results were unexpected, this should suffice to establish unexpected results in the absence of evidence to the contrary. Soni, who owed the PTO a duty of candor, made such a showing here. The PTO has not provided any persuasive basis to question Soni's comparative data and assertion that the demonstrated results were unexpected. Thus, we are persuaded that the Board's finding that Soni did not establish unexpected results is clearly erroneous.

It is difficult to imagine a more compelling case of unexpected and superior results than presented here – almost 2 orders of magnitude improvement with heater technology the art teaches as equivalent.

All claims are allowable for the reasons noted above.

Respectfully submitted,

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